U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2005-113 -EA

CASEFILE/PROJECT NUMBER (optional): COC-62036

PROJECT NAME: APD for well # Liberty Unit T18X-9G

LEGAL DESCRIPTION: T.3S., R.96W., SWSW sec.9, 6th P.M.

APPLICANT: ExxonMobil Oil Corp.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Proposed Action: The applicant proposes to perform the following actions: Construct a new access road approx. 2640'x 40' (2.4 ac.), construct a well pad with dimensions of 330'x 450', and adjacent production facility pad 80' x 200' (total pad 4.2 ac.). Drill Liberty Unit well T18X-9G, and install one buried steel 4"gas pipeline and one 3" water line in the same trench, parallel to access roads for 5808' with 50' wide working area (6.7 ac.), to a tie in point in section 20 (T3S,R96W)with an approved gas pipeline for Independence Unit well T52X-29G. The 3" water line would continue from this tie in point in sec. 20 in the same trench as an approved production line from Independence Unit well T52X-29G to this same tie in point. The production pipeline for the Independence Unit well T52X-29G was approved on *3/18/05 (CO-110-2005-053-EA)*. Total new surface disturbance on BLM would be approx. 13.3 acres.

The road would be crowned, ditched, properly drained and surfaced in accordance with BLM standards prior to drilling operations. Corrugated metal pipe would be placed as needed. No cattleguards would be required. Gravel, if needed, will be bought from an existing commercial site. Waterbreaks would be constructed as per BLM surface operating standards.

Water would either be piped with surface lines or trucked over access road. Remaining clear water would be pumped or hauled forward from previous wells after surface casing is set.

Drill cuttings would be disposed of in the reserve or dry cuttings pit and buried with at least 4' of cover. Any drilling mud with greater than 1% diesel net weight would be hauled to a proper disposal site. An alternative to hauling would be solidification in the pit with method approved by the Colorado Oil and Gas Conservation Commission (COGCC). Trash, waste paper, and other garbage would be contained in a fenced trash cage and hauled to a commercial disposal

site. Sewage from trailers on location and human wastes would be in self-contained chemical toilets or holding tanks and would be disposed of properly. Salts and chemicals that are not used in the drilling fluid and completion of the well would be removed from the location by the supplier.

Drilling fluids would be allowed to evaporate in the reserve pit until the pit is dry enough for back filling. Water produced during tests would be disposed of in the reserve pit as per Onshore Order 7. Oil produced during tests would be stored in test tanks until sold, at which time it would be hauled from the site. In the event fluids in the pit do not evaporate in a reasonable time, the fluids would be hauled to a state approved disposal site or would be mechanically evaporated.

The reserve pit would be fenced on three sides with 4-strand barbed or woven wire fence during drilling and on the fourth side after the rig is released.

No ancillary facilities would be constructed.

Upon completion of the operation and disposal of trash and debris as prescribed above, pits would be backfilled and recontoured as soon as practical after they have dried.

Unneeded disturbed surfaces remaining after completion to the surface production facilities would be shaped to match the surrounding terrain and seeded as specified by the BLM.

When the well is abandoned, ExxonMobil would rehabilitate the road and location as per BLM specifications.

Revegetation of the drill pad would comply with BLM specifications.

Rehabilitation operations would start in a timely manner following the completion of operations, typically the following construction season.

Approximate date proposed action work would start is 07/01/05

No Action Alternative: No permit would be approved, no well, access road, or pipeline would be constructed, and lessee would be denied lease rights. There would be no additional environmental consequences.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD:

NEED FOR THE ACTION: To respond to request by applicant to exercise lease rights and develop hydrocarbon reserves.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Pages 2-5 thru 2-6

Decision Language: Make federal oil and gas resources available for leasing and development in a manner that provides reasonable protection for other resource values.

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: The proposed actions are not located within a twenty mile radius of any special designation air sheds or non-attainment areas. Overall, the proposed action by itself should not greatly compromise National Ambient Air Quality Standards (NAAQS) on an hourly or daily basis.

Environmental Consequences of the Proposed Action: Temporary reductions in vegetal cover resulting from construction activities will leave soils temporarily exposed to eolian processes. During dry and windy periods, air quality may be compromised due to increased levels of fugitive dust originating from the exposed construction area. In addition, exhaust from production facility and heavy equipment at the site of the proposed actions combined with the increasing number of fluid mining activities in the Piceance Creek basin will have cumulative impacts detrimental to local air quality.

Environmental Consequences of the No Action Alternative: None

Mitigation: The operator will be responsible for complying with all local, state, and federal air quality regulations as well as providing documentation to the BLM that they have done so. To minimize production of fugitive dust, vehicle speeds should not exceed 15 mph or the application of a dust suppressant (e.g. water or "Dust Stop") shall be required on access routes during dry periods. Any stockpiled soils associated with construction activities should be

covered. Disturbed surfaces associated with construction must be promptly revegetated and adequate ground cover (woody debris) will be applied.

CULTURAL RESOURCES

Affected Environment: The proposed well pad, access route and well tie pipeline have been inventoried at the Class III (100% pedestrian) level (Bott 2004, Compliance Dated 10/18/2004, Jennings 2004, Compliance Dated 12/06/2004, Jennings 2005, Compliance Dated 7/12/2005) with no new cultural resources identified in the inventoried areas.

Environmental Consequences of the Proposed Action: The proposed action will not impact any known cultural resources.

Environmental Consequences of the No Action Alternative: There would be no new impacts to cultural resources under the No Action Alternative.

Mitigation: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: There are no known noxious weeds at the proposed location. The invasive annual cheatgrass occurs in association with unrevegetated soil disturbance, primarily associated with roads pipelines and well locations. The noxious weeds houndstongue, mullein, spotted knapweed and Russian knapweed have been found within a mile of the proposed project.

Environmental Consequences of the Proposed Action: The proposed action will create 13.5 acres of earthen disturbance which will provide safe sites for the establishment of noxious and invasive species. Prompt revegetation and weed management measures will mitigate but not eliminate this negative impact.

Environmental Consequences of the No Action Alternative: There will be no change from the present situation.

Mitigation: Promptly recontour and revegetate all disturbed areas with Native Seed mix # 3. The operator will monitor the right of way for a minimum of five years post construction to detect the presence of noxious and invasive species. The operator will be responsible for eradication of noxious weeds and cheatgrass on the right of way using materials and methods authorized in advance by the Field Manager.

MIGRATORY BIRDS

Affected Environment: An array of migratory birds fulfill nesting functions in the project area's predominantly mature pinyon-juniper woodlands and mixed sagebrush/deciduous shrub communities from late May through early August. Species associated with these woodlands and shrublands are typical and widely represented in the Resource Area and region. Those bird populations identified as having higher conservation interest (i.e., Rocky Mountain Bird Observatory, Partners in Flight program) include Virginia's warbler in the shrubland types and gray flycatcher, pinyon jay, juniper titmouse, black-throated gray warbler, and violet-green swallow in the woodlands. These birds, too, are well distributed at appropriate densities in Piceance Basin's extensive like-habitats.

Although this ridgeline has no open water or wetland areas that support or attract waterfowl use, the development of reserve pits that contain drilling fluids have attracted migratory waterfowl use in similar upland areas, and likely have similar attraction for migratory and resident passerines.

Environmental Consequences of the Proposed Action: Project construction would be initiated in early to mid July 2005 and extend for several months. Except for incidental late renesting attempts, the majority of migratory birds have completed their reproductive activities by this time. This project would have little, if any affect on the reproductive functions of migratory birds.

It has recently been brought to this Field Office's attention that migratory waterfowl have contacted drilling or frac fluids stored in reserve pits during or after completion operations and are suffering mortality in violation of the Migratory Bird Treaty Act. The extent and nature of

the problem is not well defined, but is being actively investigated by the federal agencies and the companies. Until the vectors of mortality are better understood, management measures must be conservative and relegated to preventing bird contact with frac and drilling fluids that may pose a problem.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would potentially influence migratory bird nesting activities.

Mitigation: It will be the responsibility of the operator to effectively preclude migratory bird access to, or contact with, reserve pit contents that possess toxic properties (i.e., through ingestion or exposure) or have potential to compromise the water-repellent properties of birds' plumage. Exclusion methods may include netting, the use of "bird-balls", or other alternative methods that effectively eliminate migratory bird contact with pit contents and meet BLM's approval. It will be the responsibility of the operator to notify the BLM of the method that will be used to eliminate migratory bird use two weeks prior to initiation of drilling activities. The BLM-approved method will be applied within 24 hours after drilling activities have begun. All lethal and non-lethal events that involve migratory birds will be reported to a White River Field Office Petroleum Engineer Technician immediately

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: There are no threatened, endangered, or candidate animals that are known to inhabit or derive important benefit from the project vicinity.

The woodlands composing the project site have sufficiently well developed structure to offer suitable nest and roost substrate for several BLM sensitive species, including: northern goshawk and 3 species of bat (i.e., fringed and Yuma myotis, Thompson's big-eared). Mature pinyon-juniper woodlands in Piceance Basin support a very small breeding population of northern goshawk, but surveys conducted in mid June 2005 by BLM in areas potentially influenced by pad and access construction (including a minimum 500 foot buffer around proposed project extent) revealed no evidence of past or recent occupation by any accipitrine hawk. Although the roosts and hibernacula of the 3 species of bat are almost solely associated with caves, buildings, and underground mines, it is possible that mature woodland roost sites offer limited day roost opportunity during the spring through fall months. There is some evidence to suggest that bat roost trees may be more often situated within the interior of stands rather than on the stand margins.

Environmental Consequences of the Proposed Action: The proposed action would have no conceivable influence on animals listed under the Endangered Species Act.

The proposed action would involve the clearing of approximately 13 acres of predominantly mature woodland, about 11 acres of which would involve woodlands within 100 feet of the existing access road (i.e., pad and road reroute) or a 50-foot widening (about 50 foot) of the existing road corridor (i.e., pipeline). Based on BLM's experience in Piceance Basin, the

potential for goshawk nest activity on ridgeline crests or within 200 feet of a heavily traveled well access road (virtually the entire project) is remote. Although BLM has no site-specific survey data to confirm the presence of bat roosting activity in this area, considering the nearly 250,000 acres of pinyon-juniper woodland in Piceance Basin, the involvement of woodland margins along pre-existing corridors is unlikely to have any substantive influence on the availability of roost substrate or the suitability of stands for bat roosting activity. Alternative pad, access, and pipeline alignments in this area would likely increase the extent of mature woodland clearing as well as increase the interior involvement of contiguous woodland stands.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have any influence on species protected under the Endangered Species Act or any further influence on woodland habitats that may serve as nest or roost habitat for BLM sensitive species.

Mitigation: In the event project implementation is delayed beyond April 1, 2006, supplemental woodland raptor surveys in areas potentially influenced by construction and drilling operations would be required prior to initiating surface disturbance.

Finding on the Public Land Health Standard for Threatened & Endangered species: Although the proposed project locale has relatively low potential to support special status animals, the area currently meets the standard for mature woodland associates. Woodland clearing attributable to the project is situated parallel and as close as possible to an existing road corridor, thereby minimizing functional losses in habitat utility and extent. The proposed action would not substantively decrease woodland habitat continuity or extent or measurably influence the utility of these woodlands for subsequent use by nesting goshawk or roosting bats. In the longer term, such disturbance is not inconsistent with small scale perturbation patterns (e.g., fire, insect/disease mortality) within these woodland communities.

Although the project represents incremental intrusion of development activity into mature woodland habitats, with the application of resource provisions, such as locating production facilities to maximize the area available for permanent recontouring and reclamation, the proposed action would have negligible cumulative influence on the functional capacity of surrounding woodland habitats to support nesting goshawk and roosting bats and would not contradict continued meeting of this land health standard.

THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES (includes a finding on Standard 4)

Affected Environment: There are no threatened, endangered, or candidate plant species that are known to occur within the project vicinity. The project area consists of mature pinyon-juniper woodlands which is not suitable habitat to support any TES species of plants. No TES plants have been documented in the project area.

Environmental Consequences of the Proposed Action: The proposed action would have no conceivable influence on any SSS plants or suitable habitat.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

Finding on the Public Land Health Standard for Threatened & Endangered species: There is no reasonable likelihood that the proposed action or no action alternative would have an influence on the condition or function of Threatened, Endangered, or Sensitive plant species. Thus there would be no effect on achieving the land health standard.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at sites included in the project area.

Environmental Consequences of the Proposed Action: No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. Solid wastes would be properly disposed of.

Environmental Consequences of the No Action Alternative: No hazardous or other solid wastes would be generated under the no-action alternative.

Mitigation: The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: Surface Water: The proposed action is located within the Steward Gulch and Piceance Creek watersheds. Stewart Gulch can be found in stream segment 17 of the White River Basin while the affected portion of Piceance Creek is situated in stream segment 15. A review of the Colorado's 1989 Nonpoint Source Assessment Report (plus updates), the 305(b) report, the 303(d) list and the White River ROD/RMP was done to see if any water quality concerns have been identified. The State has classified stream segment 17 of the White River Basin as "Use Protected" and further designated as beneficial for the following uses: Cold Aquatic Life 2, Recreation 2, and Agriculture. The antidegredation review requirements in the Antidegredation Rule are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply. For this reach, minimum standards for four parameters have been listed. These parameters are: dissolved oxygen = 6.0 mg/l, pH = 6.5 - 9.0, Fecal Coliform = 2000/100 ml, and 630/100 ml E. coli. Stream segment 15 has not been

designated "Use Protected" and therefore the Antidegredation Rule is applicable to this reach. Table values outline water quality standards for this reach.

Ground Water: The proposed action is located in an area of local ground water recharge. In addition, deeper aquifers will be encountered during the drilling process.

Environmental Consequences of the Proposed Action: Construction of the access road, pipeline and well pad will result in temporary exposure of soils to erosional processes. Heavy equipment used during construction combined with the removal of ground cover will increase erosive potential due to runoff (overland flows) and raindrop impact during storm events.

Local ground water may be contaminated if a spill results or pit contents are allowed to infiltrate soils. Adverse impacts on deeper ground water are possible as a result of cross aquifer contamination due to drilling.

Environmental Consequences of the No Action Alternative: None

Mitigation: The operator will be responsible for complying with all local, state, and federal water quality regulations as well as providing documentation to the BLM that they have done so.

To mitigate surface erosion due to removal of ground cover at the well pad, stockpiled soils must be covered and silt fences will be used on down gradient sides. Also, upon reclamation flow deflectors and sediment traps (woody debris) will be redistributed over the area along with Native Seed Mix #3. Also, in constructing the access road, proper drainage structures (drain dips, culverts) must be installed to reduce further surface erosion.

To mitigate contamination of local ground water, environmentally unfriendly substances (e.g. diesel) must not be allowed to contact soils. The use of impermeable matting under equipment is suggested to intercept such contaminants prior to contacting soils.
Furthermore, all pits must be lined and all wastes associated with construction and drilling will be properly treated and disposed of. Finally, aquifers beneficial for human consumption and livestock encountered during the drilling process must be properly sealed to reduce potential for contamination.

Finding on the Public Land Health Standard for water quality: Water quality in stream segments 15 and 17 currently meet standards set by the state. The proposed action may result in increased run-off which would elevate sediment loads in stream reaches below the proposed action. Spills or leaks of contaminants would reduce water quality downstream adversely affecting macroinvertebrates, vertebrates, and algae populations. However, following proper mitigation/reclamation procedures, water quality would continue to meet water quality standards.

WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)

Affected Environment: There are no BLM-administered riparian or wetland communities that have potential to become directly or indirectly involved with project implementation.

Environmental Consequences of the Proposed Action: None.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

Finding on the Public Land Health Standard for riparian systems: Because the proposed and no-action alternatives would have no reasonable probability of influencing intermittent or perennial systems that are capable of supporting riparian or wetland communities, application of the land health standard is not applicable.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No flood plains, prime and unique farmlands, Wilderness, or Wild and Scenic Rivers exist within the area affected by the proposed action. There are also no Native American religious or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: The following data is a product of an order III soil survey conducted by the NRCS in Rio Blanco County, CO. The accompanying table highlights important soil characteristics. A complete summary of this information can be found at the White River Field Office.

CSU-1 fragile soils are mapped over several locations of the access road. However, after observation of a topographic map it was verified that the proposed action dose not encounter slopes exceeding 35%. Because surface disturbing activities will not occur on slopes greater that 35% controlled surface use stipulations will not apply.

Soil Number	Soil Name	Slope	Ecological site	Salinity	Run Off	Erosion Potential	Bedrock
6	Barcus channery loamy sand	2-8%	Foothills Swale	<2	Slow	Moderate	>60
36	Glendive fine sandy loam	2-4%	Foothills Swale	2-4	Slow	Slight	>60
40	Hagga loam	0-5%	Swale Meadow	2-8	Slow	Slight	>60

Soil Number	Soil Name	Slope	Ecological site	Salinity	Run Off	Erosion Potential	Bedrock
66	Potts-Begay fine sandy loams	2-7%	Loamy Saltdesert/ Sandy Saltdesert	<2	Medium	Moderate	>60
70	Redcreek-Rentsac complex	5-30%	PJ woodlands/PJ woodlands	<2	Very high	Moderate to high	10-20
73	Rentsac channery loam	5-50%	Pinyon-Juniper woodlands	<2	Rapid	Moderate to very high	10-20
91	Torriorthents-Rock Outcrop complex	15-90%	Stoney Foothills		Rapid	Very high	10-20

6-Barcus channery loamy sand (2 to 8 percent slopes) is a deep, somewhat excessively drained soil located on alluvial fans and in narrow valleys. It formed in alluvium derived from calcareous sandstone and shale. Areas are fan shaped, triangular, or elongated and are 20 to 100 acres. The native vegetation is mainly low shrubs and grasses. Permeability of the Barcus soil is rapid. Available water capacity is low. Effective rooting depth is 60 inches or more. Runoff is slow, and the hazard of water erosion is moderate.

36-Glendive fine sandy loam is a deep, well drained soil found along drainages and on alluvial valley floors. It formed in alluvium and is calcareous throughout. Areas are long and narrow and are 20 to 150 acres in size. Slope is 2 to 4 percent. Permeability of this Glendive soil is moderately rapid. Available water capacity is moderate. Effective rooting depth is 60 inches or more. Runoff is slow, and the hazard of water erosion is slight. The soil is subject to rare periods of flooding.

40-Hagga loam is a deep, poorly drained soil found on flood plains and alluvial valley floors. It formed in alluvium derived dominantly from sandstone and shale. Slope is 0 to 5 percent. Areas are long and narrow and are 20 to 300 acres. The native vegetation is mainly water-tolerant grasses. Permeability of this Hagga soil is moderately slow. Available water capacity is high. Effective rooting depth is 60 inches or more for water-tolerant plants, but it is limited to depths between 10 and 20 inches for non-water-tolerant plants. Runoff is slow, and the hazard water erosion is slight. A seasonal high water table is at a depth of 12 to 24 inches in spring and early in summer. This soil is subject to brief periods of flooding in spring and summer.

66-Potts-Begay fine sandy loam (2 to 7 percent slopes) is located on fans and uplands. Areas are irregular in shape and are 20 to 1,000 acres in size. The native vegetation is mainly shrubs and grasses. Permeability of the Potts soil is moderate. Available water capacity is moderately high. Effective rooting depth is 60 inches or more. Runoff is slow to medium, and the hazard of water erosion is moderate. Permeability of the Begay soil is moderately rapid. Available water capacity is moderate. Effective rooting depth is 60 inches or more. Runoff is slow, and the hazard of water erosion is slight. The hazard of soil blowing is moderate if the vegetation is removed.

70-Redcreek-Rentsac complex (5 to 30 percent slopes) is found on mountainsides and ridges. Areas are elongated and are 40 to 300 acres. The native vegetation is mainly pinyon and juniper trees with an understory of shrubs and grasses. Permeability of the Redcreek soil is moderately

rapid. Available water capacity is very low. Effective rooting depth is 10 to 20 inches. Runoff is medium, and the hazard of water erosion is moderate to high. Permeability of the Rentsac soil is moderately rapid. Available water capacity is very low. Effective rooting depth is 10 to 20 inches. Runoff is medium, and the hazard of water erosion is moderate to high.

73-Rentsac channery loam (5 to 50 percent slopes) is a shallow, well drained soil found on ridges, foothills, and side slopes. It formed in residuum derived dominantly from calcareous sandstone. Areas are elongated and are 200 to 5,000 acres. The native vegetation is mainly pinyon, juniper, brush, and grasses. Permeability of this Rentsac soil is moderately rapid. Available water capacity is very low. Effective rooting depth is 10 to 20 inches. Runoff is rapid, and the hazard of water erosion is moderate to very high.

91-Torriorthents-Rock outcrop complex (15 to 90 percent slopes) is found on extremely rough and eroded areas on mountains, hills, ridges, and canyon sides. Slopes mainly face south. The native vegetation is mainly sparse shrubs and grasses with some pinyon and juniper trees. Permeability of the Torriorthents is moderate. Available water capacity is very low. Effective rooting depth is 10 to 20 inches. Runoff is very rapid, and the hazard of water erosion is very high. Torriorthents are calcareous throughout. In some areas the surface layer is stony or flaggy.

Environmental Consequences of the Proposed Action: The well pad, access road and pipeline are situated on soils which are calcareous nature. Improper drainage from the project areas will increase potential for overland flows and accelerate the dissolution of calcium carbonate leading to soil piping, head cutting and gully formation. Removal of limited ground cover will also expose soils to erosional processes. Heavy traffic will increase soil compaction decreasing infiltration rates which in turn will also increase potential for erosive overland flows.

Leaks or spills of environmentally unfriendly substances on or near the pad may contaminate soils hindering revegetation efforts. Soils unable to support a healthy plant community will be less cohesive (due to lack of root structure) and more vulnerable to erosional processes.

Environmental Consequences of the No Action Alternative: None

Mitigation: Comply with "Gold Book" surface operating standards for constructing well pad, pipeline and access road. Revegetate all disturbed surfaces following construction with Native Seed Mix #3 as defined in the White River ROD/RMP. Flow deflectors and sediment traps (woody debris) must also be utilized in attempts to mitigate erosive potential of overland flows. Stockpiled soils must be covered and silt fences will be situated down gradient

To mitigate contamination of soils and local ground water, environmentally unfriendly substances (e.g. diesel) must not be allowed to contact soils. The use of impermeable matting under equipment is suggested to intercept such contaminants prior to contacting soils.

Complete reclamation will follow abandonment of well pad. Access road and well pad will be recontoured and 100% of disturbed surfaces will be revegetated with Native Seed Mix #3.

Finding on the Public Land Health Standard for upland soils: At the present time, soils in the vicinity of the proposed action exhibit infiltration and permeability rates that are appropriate to soil type, landform, climate, and geologic processes. The proposed actions will cause decreases in both infiltration and permeability rates due to soil compaction and loss of vegetal cover. However, with proper mitigation soil health should continue to meet the state standards.

VEGETATION (includes a finding on Standard 3)

Affected Environment: Vegetation in the project area is dominated by pinyon- juniper woodland. Most of this woodland is either middle age or mature. Understory shrubs include Utah serviceberry, mountain mahogany and Wyoming big sagebrush with a variety of native grasses and forbs.

Environmental Consequences of the Proposed Action: The principal impact to vegetation will be complete removal of vegetation on the well site and the earthen disturbance associated with it. In terms of plant community composition, structure and function, the principal negative impact over the long term would occur if invasive species or noxious weeds are allowed to establish and proliferate on the disturbed areas resulting from pad, access road and waterline construction.

Environmental Consequences of the No Action Alternative: There will be no change from the present situation.

Mitigation: Promptly recontour and revegetate all disturbed areas with Native Seed mix # 3. The operator will monitor the right of way for a minimum of five years post construction to detect the presence of noxious and invasive species. The operator will be responsible for eradication of noxious weeds and cheatgrass on the right of way using materials and methods authorized in advance by the Field Manager.

Native Seed Mix #	Species (Variety)	Lbs. PLS per Acre	Ecological Sites
3	Western wheatgrass (Rosanna) Bluebunch wheatgrass (Secar) Thickspike wheatgrass (Critana) Indian ricegrass (Nezpar) Fourwing saltbush (Wytana) Utah sweetvetch Alternates: Needle and thread, globemallow	2 2 2 1 1 1	Gravelly 10"-14", Pinyon/Juniper Woodland, Stony Foothills, 147 (Mountain Mahogany)

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial)*:* Vegetation in the project area currently meets the Standard and will continue to meet the Standard after project implementation with applied mitigation.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: There are no BLM-administered aquatic communities that would have any reasonable probability of being directly or indirectly influenced by the project implementation (the nearest consolidated federal holding being over 15 miles downstream in Piceance Creek).

Environmental Consequences of the Proposed Action: None.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): Because the proposed and no-action alternatives would have no reasonable probability of influencing aquatic habitats, application of the land health standards is not applicable.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The project area is encompassed by general winter ranges of deer and elk. Elk are capable of using these lands throughout the winter, but deer use is typically most prevalent from October through January and again in April and May.

These mature pinyon-juniper woodlands support relatively low densities of breeding Cooper's and sharp-shinned hawk and long-eared owl. Based on BLM's experience, woodland nesting raptors tend to avoid selecting nest sites along ridgeline crests and in close proximity to breaks in canopy (e.g., the existing road corridor, see discussion in Special Status Species section). The area potentially influenced by the proposed action was surveyed for woodland nesting raptors by a BLM biologist during the 2005 nesting season; no evidence of past or recent raptor nest activity was found. The project would involve no cliff substrate suitable for use by golden eagle or red-tailed hawk.

Other small mammals and birds using this area are typical and widely distributed in extensive like habitats across the Resource Area and northwest Colorado; there are no narrowly endemic or highly specialized species known to inhabit those lands potentially influenced by this action. The pad location and road realignment, as initially proposed, involved a 30-year old ungulate exclosure established for non-game wildlife studies during Experimental Oil Shale Tract development. This facility continues to provide valuable insight on the effects of ungulate grazing on mature pinyon-juniper woodlands.

Environmental Consequences of the Proposed Action: Big game impacts associated with unregulated vehicle use and access proliferation (i.e., behavioral avoidance and habitat disuse; increased energetic demands during critical timeframes) received prominent address in the White River ROD/RMP. Because this action requires little access (about 250 feet) and primary access

to Bailey Ridge is privately controlled, there would be virtually no effective long term increase in the intensity and frequency of road use outside well maintenance regimens.

The extent and location of woodland clearing activity (13 acres) would represent a minor and, assuming successful interim reclamation, shorter-term reduction in the herbaceous forage base for all resident wildlife. Long-term reductions in the local availability of woodland cover would be minor and discountable relative to the surrounding resource base, especially since nearly all disturbances are situated along an established road corridor where habitat utility is presently compromised to some degree. As a long term consideration, pad location and size are not inconsistent with natural perturbation patterns associated with insect/disease infestations and wildfire, although redevelopment of an effective shrub canopy (e.g., woody forage base for big game and nest substrate for nongame birds) would likely span several decades after final reclamation.

The proposed pad is designed to accommodate up to 4 additional wells, which would offer strong advantages in reducing the ultimate extent and distribution of woodland conversions attributable to well pad, access, and pipeline construction on adjoining parcels.

It is unlikely that the project area would be selected by raptors for nesting during the 2006 season. However, in the event project implementation is delayed beyond April 1, 2006, supplemental woodland raptor surveys in areas potentially influenced by construction and drilling operations would be required prior to initiating surface disturbance.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have potential to influence terrestrial wildlife populations or habitats.

Mitigation: In the event project implementation is delayed beyond April 1, 2006, supplemental woodland raptor surveys in areas potentially influenced by construction and drilling operations would be required prior to initiating surface disturbance.

Proposed facilities, including the road reroute, was redesigned to avoid the ungulate grazing exclosure.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): The land health standard for animal communities is currently being met across the proposed project area. Project implementation would, with effective reclamation, have no lasting consequence on the utility or suitability of habitat as a source of forage or cover for local big game and non-game animal populations. The no-action or proposed action alternatives would not detract from continued meeting of this standard.

OTHER NON-CRITICAL ELEMENTS: For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation			X
Cadastral Survey	X		
Fire Management			X
Forest Management			X
Geology and Minerals			X
Hydrology/Water Rights		X	
Law Enforcement		X	
Noise		X	
Paleontology			X
Rangeland Management			X
Realty Authorizations			X
Recreation			X
Socio-Economics		X	
Visual Resources			X
Wild Horses	X		

ACCESS AND TRANSPORTATION

Affected Environment: BLM road 1008 is serving as primary access to proposed location and proposed action persists within a travel are identified as closed to motorized cross-country travel from October 1 through May 1 of each year.

Environmental Consequences of the Proposed Action: As access is controlled by private landowner, public access is limited. An increase of traffic on BLM 1008 is likely during construction phase of the project and will continue as long as the well(s) are in production.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

FIRE MANAGEMENT

Affected Environment: Due to the existing tree cover of sub-mature pinion and juniper, there will be a need for the operator to clear some of these trees. If not adequately treated, these trees will result in elevated hazardous fuels conditions and remain on-site for many years. These accumulations of dead material are very receptive to fire brands and spotting from wind driven fires and can greatly accelerate the rate of spread of the fire front. The road(s) associated with this project may be used by the general public for a variety of uses, including access for fire wood gathering, hunting and other dispersed recreational activities. Increased public use of an area will nearly always result in an increased potential for man-caused wildland fires.

The National Fire Plan calls for "firefighter and public safety" to be the highest priority for all fire management activities. In the pinion, juniper, and brush types common on the White River Resource Area, roads and other man-made openings are commonly used as fuel breaks or barriers to control the spread of both wildland and prescribed fires. By reducing the activity fuels created from this proposal, future fire management efforts in this area should be safer for those involved and more effective.

Environmental Consequences of the Proposed Action: There will be approximately 12 acres of road, well pad, and pipeline construction requiring the removal of pinion/juniper fuel type with in the proposed action location. If not treated the slash and woody debris will create an elevated hazardous dead fuel loading which could pose significant control problems in the event of a wildfire. Additionally there would be greater threat to public, ExxonMobil, and fire suppression personnel, and under the right climactic conditions could threaten the compressor and housing "man camp" facilities at Magnolia Camp.

Environmental Consequences of the No Action Alternative: There would be no tree removal or disturbance which would cause significant dead fuel loading.

Mitigation: Several options may be considered for treatment of slash from this project. A hydro-ax or other mulching type machine could be used to remove the trees. The machines are capable of shredding trees up to 12" in diameter and 15' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size. The mulch is evenly scattered across the surface and the tires or tracks distribute the weight of the equipment. This effectively breakdown the woody fuel and scatters the debris thereby eliminating any hazardous fuel load adjacent to the new road and well pad.

The other option would be to cut trees and have them removed for firewood, posts, or other products. The branches and tops should be lopped and scattered to a depth of 24 inches or less. If the products are left for collection by the general public, they should be piled along the road side or pad to facilitate removal.

Should there be a requirement for tree debris to be brought back onto the pipeline ROW for reclamation that debris should be scattered not jackpotted and not exceed 2-5 tons/acre.

For the entire pipeline ROW the disturbed areas must be promptly re-seeded with native seed mix #3. All weeds occurring on the ROW must be treated as identified in the noxious weed section.

FOREST MANAGEMENT

Affected Environment: As noted in the vegetation section, the proposed project would affect pinyon/juniper woodlands. These woodlands are classified as non-commercial and not considered within the allowable harvest level for the Piceance GRA. These woodlands contain an even mix of pinyon and juniper with greater quantities of firewood estimated at 14 cords per

acre. These woodlands are available for harvest by private individuals with the primary products being firewood and fence posts. There is limited public access into this area which limits harvest. The well pad would affect 4.2 acres. Upgrade of the access road is expected to affect 1.5 acres and the pipeline would affect 6.7 acres.

Environmental Consequences of the Proposed Action: The proposed route would not result in loss of any woodland products of commercial value. The need for preventing vehicular access of these pipelines is minimized by the lack of public access, and as such the trees removed during construction would not be drug back onto the right-of-way. The forest products would be purchased by the permit holder and treated as described below.

Environmental Consequences of the No Action Alternative: None

Mitigation: All trees removed in the process of construction shall be purchased from the Bureau of Land Management. The trees shall be cut with a maximum stump height of six inches and disposed of by one of the following methods:

a. Trees must be cut before being dozed off the area of disturbance. Trees shall be cut into four-foot lengths, down to four inches in diameter and placed along the edge of the disturbance.

b. Purchased trees may be removed from federal land for resale or private use. Limbs may be scattered off the area of disturbance but not dozed off.

GEOLOGY AND MINERALS

Affected Environment: ExxonMobil's well is located in the area identified in the RMP as available for oil shale leasing. The surface geologic formation of the well location is the Uinta and ExxonMobil's targeted zone is in the Mesaverde Formation. During drilling potential water, oil shale, and gas zones will be encountered from surface to the targeted zone. Aquifers that will be encountered during drilling are the Perched in the Uinta, the A-groove, B-groove and the Dissolution Surface in the Green River formation. This area is known for difficulties in drilling and cementing through the A-groove, B-groove, the Dissolution Surface and the upper part of the Wasatch. The well is located on federal oil and gas lease COC-062041

Environmental Consequences of the Proposed Action: Drilling and completion of this well may adversely affect the aquifers if there is loss of circulation during drilling or problems cementing the casing. However, the proposed cementing and completion procedure of the action isolates the formations and will prevent the migration of gas, water, and oil between formations. Development of these wells will deplete the hydrocarbon resources in the targeted formation.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

PALEONTOLOGY

Affected Environment: The proposed well pad location, access road and well tie pipeline is located in an area mapped as the Uinta Formation (Tweto 1979) which the BLM has classified as a Condition I formation meaning it is known to produce scientifically important fossil resources.

Environmental Consequences of the Proposed Action: If it should be come necessary to excavate into the underlying rock formation to build the road, level the well pad, excavate the reserve/blooie pit or bury any of the well tie pipelines there is a potential to impact scientifically important fossil resources.

Environmental Consequences of the No Action Alternative: There would be no new impacts to fossil resources under the No Action Alternative.

Mitigation: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. If at any time it becomes necessary to excavate into the underlying rock formation to construct the access road, level the well pad, excavate the reserve/blooie pit or bury any of the well tie pipelines a paleontological monitor shall be present prior to the initiation of any such construction.

RANGELAND MANAGEMENT

Affected Environment: The proposed action is within the Oldland Brothers use area of the Piceance Mountain allotment (06023). Their operation is authorized to use public lands with 1300 cows from 5/1- 11/30 on a yearly basis. The project is within the spring/fall use area of the allotment.

Environmental Consequences of the Proposed Action: The actions proposed will result in a public land forage loss to livestock of about 1 animal unit months (AUM). An AUM equates to the forage needs of a mature cow with calf for one month.

Environmental Consequences of the No Action Alternative: There will be no change from the present situation.

Mitigation: Promptly recontour and revegetate all disturbed areas with Native Seed mix # 3. The operator will monitor the well pad/access road/ pipeline right of way for a minimum of five years post construction to detect the presence of noxious and invasive species. The operator will be responsible for eradication of noxious weeds and cheatgrass on the right of way using materials and methods authorized in advance by the Field Manager.

REALTY AUTHORIZATIONS

Affected Environment: The proposed action is for facilities that cross unit boundaries and will require a right-of-way for the water and natural gas pipelines.

Environmental Consequences of the Proposed Action: The proposed action includes a water and natural gas pipeline coming from the Liberty T18X-9G. The water pipeline will come from the Independence T52X-29G to hook into production facilities located on the Liberty T18X-9G well pad. The natural gas pipeline will come from the Liberty well and hook into the Independence pipeline. These two pipelines will be buried in the same trench.

Environmental Consequences of the No Action Alternative: None

Mitigation: The Conditions of Approval will be incorporated into the rights-of-way grant and the original terms, conditions, and stipulations remain in full force and effect.

RECREATION

Affected Environment: The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use.

The project area has been delineated a Recreation Opportunity Spectrum (ROS) class of Semi-Primitive Motorized (SPM). SPM physical and social recreation setting is typically characterized by a natural appearing environment with few administrative controls, low interaction between users but evidence of other users may be present. SPM recreation experience is characterized by a high probability of isolation from the sights and sounds of humans that offers an environment that offers challenge and risk.

Environmental Consequences of the Proposed Action: The public will lose approximately 15 acres of dispersed recreation potential while wells are in operation. The public will most likely not recreate in the vicinity of these facilities and will be dispersed elsewhere. If action coincides with hunting seasons (September through November) it will most likely disrupt the experience sought by those recreationists.

Cumulatively, with the introduction of new well pads and roads, an increase of traffic could be expected increasing the likihood of human interactions, the sights and sounds associated with the human environment and a less naturally appearing environment.

Environmental Consequences of the No Action Alternative: No loss of dispersed recreation potential and no impact to hunting recreationists.

Mitigation: None.

VISUAL RESOURCES

Affected Environment: The proposed action would be located in an area with a VRM III classification. The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Environmental Consequences of the Proposed Action: The proposed action would be located on the top of a ridgeline in moderately dense stands of Pinyon/Juniper. The nearest route that would be traveled by a casual observer would be approximately two miles distance. That route would be RBC 5 (Piceance Creek Road) which is at a lower elevation along Piceance Creek. The proposed action would not be visible from RBC 5. Access to the proposed action would be through private property. By painting all production equipment Juniper Green to blend with and mimic the surrounding vegetation, the level of change to the characteristic landscape should be low, and the objectives of the VRM III classification would be retained.

Environmental Consequences of the No Action Alternative: There would be no impacts.

Mitigation: All production facilities shall be painted Juniper Green.

CUMULATIVE IMPACTS SUMMARY: This action is consistent with the scope of impacts addressed in the White River ROD/RMP. The cumulative impacts of these activities are addressed in the White River ROD/RMP for each resource value that would be affected by the proposed action.

REFERENCES CITED:

Bott, Tracy
2004 Exxon-Mobil Corporation: Class III Cultural Resource Inventory for the Proposed Independence Units. T52X-29G and T51-11G; Wells, Access, and Pipelines, Rio Blanco County, Colorado. Metcalf Archaeological Consultants, Inc., Eagle, Colorado.

Jennings, Sarah
2004 A Class III Cultural Resource Inventory for the Proposed Exxon-Mobil Corporation T25X-25G Well Pad, Access Road and Pipeline and the T18X-9G Well Pad in Rio Blanco County, Colorado. Metcalf Archaeological Consultants, Inc., Eagle, Colorado.
2005 A Class III Cultural Resource Inventory for the Proposed Exxon-Mobil Corporation T18X-9G Pipeline in Rio Blanco County, Colorado. Metcalf Archaeological Consultants, Inc., Eagle, Colorado.

Tweto, Ogden
1979 Geologic Map of Colorado. United States Geologic Survey, Department of the Interior, Reston, Virginai.

PERSONS / AGENCIES CONSULTED: None

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Nate Dieterich	Hydrologist	Air Quality
Tamara Meagley	Natural Resource Specialist	Areas of Critical Environmental Concern
Tamara Meagley	Natural Resource Specialist	Threatened and Endangered Plant Species
Michael Selle	Archeologist	Cultural Resources Paleontological Resources
Mark Hafkenschiel	Rangeland Management Specialist	Invasive, Non-Native Species, Rangeland Management, Vegetation
Ed Hollowed	Wildlife Biologist	Migratory Birds
Ed Hollowed	Wildlife Biologist	Threatened, Endangered and Sensitive Animal Species, Wildlife
Bo Brown	Hazmat Collateral	Wastes, Hazardous or Solid
Nate Dieterich	Hydrologist	Water Quality, Surface and Ground Hydrology and Water Rights
Ed Hollowed	Wildlife Biologist	Wetlands and Riparian Zones
Chris Ham	Outdoor Recreation Planner	Wilderness
Nate Dieterich	Hydrologist	Soils
Ed Hollowed	Wildlife Biologist	Wildlife Terrestrial and Aquatic
Chris Ham	Outdoor Recreation Planner	Access and Transportation
Robert Fowler	Natural Resource Specialist	Fire Management
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Penny Brown	Realty Specialist	Realty Authorizations
Chris Ham	Outdoor Recreation Planner	Recreation
Keith Whitaker	Natural Resource Specialist	Visual Resources

Finding of No Significant Impact/Decision Record (FONSI/DR)

CO-110-2005-113-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION/RATIONALE: It is my decision to approve the proposed action with the mitigation measures listed below.

MITIGATION MEASURES: 1. The operator will be responsible for complying with all local, state, and federal air quality regulations as well as providing documentation to the BLM that they have done so. To minimize production of fugitive dust, vehicle speeds must not exceed 15 mph or the application of a dust suppressant (e.g. water or "Dust Stop") will be required on access routes during dry periods. Any stockpiled soils associated with construction activities must be covered. Disturbed surfaces associated with construction must be promptly revegetated and adequate ground cover (woody debris) will be applied.

2. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines

for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

3. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

4. It will be the responsibility of the operator to effectively preclude migratory bird access to, or contact with, reserve pit contents that possess toxic properties (i.e., through ingestion or exposure) or have potential to compromise the water-repellent properties of birds' plumage. Exclusion methods may include netting, the use of "bird-balls", or other alternative methods that effectively eliminate migratory bird contact with pit contents and meet BLM's approval. It will be the responsibility of the operator to notify the BLM of the method that will be used to eliminate migratory bird use two weeks prior to initiation of drilling activities. The BLM-approved method will be applied within 24 hours after drilling activities have begun. All lethal and non-lethal events that involve migratory birds will be reported to a White River Field Office Petroleum Engineer Technician immediately.

5. In the event project implementation is delayed beyond April 1, 2006, supplemental woodland raptor surveys in areas potentially influenced by construction and drilling operations would be required prior to initiating surface disturbance.

6. The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

7. The operator will be responsible for complying with all local, state, and federal water quality regulations as well as providing documentation to the BLM that they have done so.

8. To mitigate surface erosion due to removal of ground cover at the well pad, stockpiled soils must be covered and silt fences will be used on down gradient sides. Also, upon reclamation flow deflectors and sediment traps (woody debris) will be redistributed over the area along with Native Seed Mix #3. Also, in constructing the access road, proper drainage structures (drain dips, culverts) must be installed to reduce further surface erosion.

9. To mitigate contamination of local ground water, environmentally unfriendly substances (e.g. diesel) must not be allowed to contact soils. The use of impermeable matting under equipment is suggested to intercept such contaminants prior to contacting soils. Furthermore, all pits must be lined and all wastes associated with construction and drilling will be properly treated and disposed of. Finally, aquifers beneficial for human consumption and livestock encountered during the drilling process must be properly sealed to reduce potential for contamination.

10. Comply with "Gold Book" surface operating standards for constructing well pad, pipeline and access road. Revegetate all disturbed surfaces following construction with Native Seed Mix #3 as defined in the White River ROD/RMP. Flow deflectors and sediment traps (woody debris)

must also be utilized in attempts to mitigate erosive potential of overland flows. Stockpiled soils must be covered and silt fences will be situated down gradient

11. To mitigate contamination of soils and local ground water, environmentally unfriendly substances (e.g. diesel) must not be allowed to contact soils. The use of impermeable matting under equipment is suggested to intercept such contaminants prior to contacting soils. Complete reclamation will follow abandonment of well pad.

12. Access road and well pad will be recontoured and 100% of disturbed surfaces will be revegetated with Native Seed Mix #3. The operator will monitor the right of way for a minimum of five years post construction to detect the presence of noxious and invasive species. The operator will be responsible for eradication of noxious weeds and cheatgrass on the right of way using materials and methods authorized in advance by the Field Manager.

Native Seed Mix #	Species (Variety)	Lbs. PLS per Acre	Ecological Sites
3	Western wheatgrass (Rosanna) Bluebunch wheatgrass (Secar) Thickspike wheatgrass (Critana) Indian ricegrass (Nezpar) Fourwing saltbush (Wytana) Utah sweetvetch Alternates: Needle and thread, globemallow	2 2 2 1 1 1	Gravelly 10"-14", Pinyon/Juniper Woodland, Stony Foothills, 147 (Mountain Mahogany)

13. In the event project implementation is delayed beyond April 1, 2006, supplemental woodland raptor surveys in areas potentially influenced by construction and drilling operations would be required prior to initiating surface disturbance.

14. Several options may be considered for treatment of slash from this project. A hydro-ax or other mulching type machine could be used to remove the trees. The machines are capable of shredding trees up to 12" in diameter and 15' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size. The mulch is evenly scattered across the surface and the tires or tracks distribute the weight of the equipment. This effectively breakdown the woody fuel and scatters the debris thereby eliminating any hazardous fuel load adjacent to the new road and well pad. The other option would be to cut trees and have them removed for firewood, posts, or other products. The branches and tops should be lopped and scattered to a depth of 24 inches or less. If the products are left for collection by the general public, they should be piled along the road side or pad to facilitate removal.

15. Should there be a requirement for tree debris to be brought back onto the pipeline ROW for reclamation that debris should be scattered not jackpotted and not exceed 2-5 tons/acre. For the entire pipeline ROW the disturbed areas must be promptly re-seeded with native seed mix #3. All weeds occurring on the ROW must be treated as identified in the noxious weed section.

16. All trees removed in the process of construction shall be purchased from the Bureau of Land Management. The trees shall be cut with a maximum stump height of six inches and disposed of by one of the following methods:

a. Trees must be cut before being dozed off the area of disturbance. Trees shall be cut into four-foot lengths, down to four inches in diameter and placed along the edge of the disturbance.

b. Purchased trees may be removed from federal land for resale or private use. Limbs may be scattered off the area of disturbance but not dozed off.

17. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

18. If at any time it becomes necessary to excavate into the underlying rock formation to construct the access road, level the well pad, excavate the reserve/blooie pit or bury any of the well tie pipelines a paleontological monitor shall be present prior to the initiation of any such construction.

19. Promptly recontour and revegetate all disturbed areas with Native Seed mix # 3. The operator will monitor the well pad/access road/ pipeline right of way for a minimum of five years post construction to detect the presence of noxious and invasive species. The operator will be responsible for eradication of noxious weeds and cheatgrass on the right of way using materials and methods authorized in advance by the Field Manager.

20. The Conditions of Approval will be incorporated into the rights-of-way grant and the original terms, conditions, and stipulations remain in full force and effect.

21. All production facilities shall be painted Juniper Green.

NAME OF PREPARER: Keith Whitaker

NAME OF ENVIRONMENTAL COORDINATOR: Caroline Hollowed

SIGNATURE OF AUTHORIZED OFFICIAL: _____
Field Manager

DATE SIGNED: 7/13/05

ATTACHMENTS: Location map of the proposed action.

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Location of Proposed Action
CO-110-2005-113-EA